We claim:

1. An emulsion comprising:

(a) from about 30% to about 90% by weight of water;

(b) from about 10% to about 70% by weight of an acrylic polymer that contains:

(i) from about 20% to about 80% by weight of recurring units of t-butyl acrylate or methacrylate;

(ii) from about 1% to about 20% by weight of recurring units of acrylic or methacrylic acid; and

(iii) up to 79% by weight of recurring units of a third monomer;

(c) from about 0.2% to about 10% by weight of a emulsifying agent; and

(d) up to 20% by weight of an organic solvent.

2. The emulsion of claim 1 that contains from about 40% to about 60% by weight of water.

3. The emulsion of claim 1 wherein the acrylic polymer contains from about 30% to about 70% of recurring units of t-butyl acrylate or methacrylate.

4. The emulsion of claim 1 wherein the third monomer is selected from the group consisting of vinyl aromatics, acrylic and methacrylic acids, C_1 to C_{10} alkyl acrylates and methacrylates, vinyl halides, vinyl ethers and esters, and mixtures thereof.

5. The emulsion of claim 1 wherein the third monomer is a C_1 to C_{10} alkyl acrylate or methacrylate.

6. The emulsion of claim 1 wherein the third monomer is selected from the group consisting of C_1 to C_{10} alkyl acrylates and methacrylates whose homopolymer Tgs (glass transition temperatures) are lower than about 25°C.

7. The emulsion of claim 1 where the third monomer is selected from the group consisting of n-butyl acrylate, n-butyl methacrylate, lauryl

acrylate, lauryl methacrylate, tridecyl acrylate, tridecyl methacrylate, 2-ethylhexyl acrylate, and 2-ethylhexyl methacrylate.

8. The emulsion of claim **1** wherein the acrylic polymer contains essentially no styrene recurring unit.

9. The emulsion of claim **1** wherein the emulsifying agent is selected from the group consisting of sorbitan monooleate, sorbitan monolaurate, polyvinyl alcohol, poly(ethylene oxide), sodium and potassium stearates, laurates, and palmitates, sodium lauryl sulfate, and sodium dodecylbenzene sulfonate.

10. The emulsion of claim **1** wherein the emulsifying agent is dodecylbenzene sulfonate.

11. A latex coating comprising the emulsion of claim **1**.

12. An emulsion consisting essentially of:

(a) from about 40% to about 60% by weight of water;

(b) from about 40% to about 60% by weight of an acrylic polymer that contains:

(i) from about 40% to about 60% by weight of recurring units of t-butyl acrylate or methacrylate;

(ii) from about 1% to about 20% by weight of recurring units of acrylic or methacrylic acid; and

(iii) up to about 79% by weight of recurring units of one or more monomers selected from the group consisting of n-butyl acrylate, n-butyl methacrylate, lauryl acrylate, lauryl methacrylate, tridecyl acrylate, tridecyl methacrylate, 2-ethylhexyl acrylate, and 2-ethylhexyl methacrylate; and

(c) from about 0.2% to about 2% by weight of dodecylbenzene sulfonate.

13. A latex coating comprising

(a) from about 30% to about 90% by weight of water;

(b) from about 10% to about 70% by weight of an acrylic polymer that contains from about 20% to about 80% by weight of recurring units of t-butyl acrylate or methacrylate;

(c) from about 0.2% to about 10% by weight of a emulsifying agent;

(d) up to 20% by weight of an organic solvent;

(e) up to 60% by weight of a pigment; and

(f) from 1 to 30% by weight of a crosslinker,

wherein the coating has improved moisture and corrosion resistance.

14. The latex coating of claim **13** wherein the acrylic polymer has an acid number greater than about 2 mg KOH/g.

15. The latex coating of claim **13** wherein the organic solvent is an alcohol.

16. The latex coating of claim **13** wherein the pigment is titanium dioxide.

17. The latex coating of the claim **13** wherein the crosslinker is a melamine compound or a blocked isocyanate.

18. A process for making an emulsion, comprising:

(a) charging a reactor with water, an emulsifying agent, an initiator, and a portion of a monomer mixture that contains from about 20% to about 80% by weight of t-butyl acrylate or methacrylate;

(b) polymerizing the reactor contents to form a seed emulsion; and

(c) gradually adding the remaining monomer mixture into the seed emulsion to complete the polymerization.

19. The process of claim **18** wherein the initiator is a redox system that comprises an initiator selected from potassium and sodium persulfates, hydrogen peroxide, t-butyl hydroperoxide, and succinic acid peroxide, and a reducing agent selected from ferrous ion compounds, sodium bisulfite, sodium hydrosulfite, and sodium formaldehyde sulfoxylate.

20. The process of claim **18** wherein the polymerization is performed at a temperature within the range of about –50°C to about 100°C.